

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

1-5. (Cancelled).

6. (Currently Amended) A medicine prototype support system for an ingredient manufacturer developing a medical product including a confidential first main ingredient at a request of a product manufacturer comprising:

one or more computer processors;

a database using a storage device for storing main medical product ingredient information comprising at least information regarding ~~[[a]]~~ the confidential first main ingredient and information regarding a second main ingredient, the information regarding the confidential first main ingredient being confidential information of the product manufacturer;

communication means for receiving main ingredient information from the database;

information conversion means using at least one of the one or more computer processors for converting main ingredient information to be transmitted to a computer system of a composition manufacturer from information regarding the confidential first main ingredient included in a request from a product manufacturer to information regarding the second main ingredient stored in the database by selecting an intermediate main ingredient having one or more material properties similar to the confidential first main ingredient and then selecting a second main ingredient having one or more material properties similar to the ~~confidential first~~ intermediate main

ingredient, but having a different pharmacological effect than the confidential first main ingredient;

composition ingredient determination means using at least one of the one or more computer processors for selecting a composition ingredient; and

communication means for transmitting information regarding the selected second main ingredient and the selected composition ingredient to the computer system of the composition manufacturer, wherein

the medicine prototype support system is configured to receive a first request for prototype manufacture, including the information regarding the confidential first main ingredient, from a computer system of the product manufacturer, to select the second main ingredient using the information conversion means, to select the composition ingredient using the composition ingredient determination means, and to transmit a second request for prototype manufacture including the information regarding the selected second main ingredient and the selected composition ingredient to a computer system of the composition manufacturer, so that the confidential first main ingredient information received from the computer system of the product manufacturer is not transmitted to the computer system of the composition manufacturer.

7-8. (Cancelled)

9. (Currently Amended) A medicine prototype support system for an ingredient manufacturer developing a medical product including a confidential first ingredient at a request of a product manufacturer comprising:

one or more computer processors;

a database using a storage device for storing main medical product ingredient information comprising at least confidential first main ingredient information and second main ingredient information, the first confidential main ingredient information being confidential information of the product manufacturer and the second main ingredient information being non-confidential;

information conversion software that converts main ingredient information to be transmitted to a computer system of a composition manufacturer from information regarding the confidential first main ingredient included in a request from the product manufacturer to information regarding the second main ingredient stored in the database by selecting a second main ingredient having one or more properties similar to a confidential first main ingredient, but having a different pharmacological effect than the confidential first main ingredient;

composition ingredient determination software that selects composition ingredient information based on one or more properties of the confidential first main ingredient or the selected second main ingredient; and

a server for transmitting information regarding the selected second main ingredient and the selected composition ingredient to a computer system of a composition manufacturer, wherein

the medicine prototype support system is configured to receive a first request for prototype manufacture, including information regarding the confidential first main ingredient, from the product manufacturer, to select the second main ingredient using the information conversion software, to select the composition ingredient using the composition ingredient determination software, and to transmit a second request for

prototype manufacture including information regarding the second main ingredient and the composition ingredient to the composition manufacturer system, so that the information regarding the confidential first main ingredient received from the computer system of the product manufacturer is not transmitted to the computer system of the composition manufacturer.

10. (Currently Amended) A method of using a medicine prototype support system comprising the steps of:

receiving a first request for prototype manufacture of a medical product including a first main ingredient from a computer system of a product manufacturer via a communications server, the request including medical product information regarding [[a]] the first main ingredient that is confidential information of the product manufacturer;

storing the confidential first main ingredient information in a database contained in a storage device,

using the database to convert the main ingredient information to be transmitted to a computer system of a composition manufacturer from information regarding the confidential first main ingredient included in the request from the product manufacturer to information regarding a second main ingredient stored in the database by selecting a second main ingredient having one or more properties similar to the confidential main ingredient, but having a different pharmacological effect than the confidential first main ingredient;

determining a composition ingredient based on the confidential main ingredient information or the selected second main ingredient information;

transmitting a second request for prototype manufacture to a computer system of a composition manufacturer via the communications server, the request for prototype manufacture including the identities of the selected second main ingredient and the selected composition ingredient; and

maintaining the confidentiality of the confidential first main ingredient information by not transmitting the confidential first main ingredient information to the computer system of the composition manufacturer.

11. (Previously Presented) The method of claim 10, further comprising transmitting a second request for prototype manufacture to a second composition manufacturer.

12. (Previously Presented) The method of claim 10, wherein the confidential main ingredient information received from the product manufacturer includes the identity of the main ingredient.

13. (Currently Amended) A medicine prototype support system for an ingredient manufacturer developing a medical product including a confidential first main ingredient at a request of a product manufacturer comprising:

one or more computer processors;

a database using a storage device for storing main ingredient information comprising at least information regarding a confidential first main medical product ingredient and information regarding a second main ingredient, the information

regarding the confidential first main ingredient being confidential information of the product manufacturer;

information conversion means using at least one of the computer processors for converting main ingredient information to be transmitted to a computer system of a composition manufacturer from information regarding the confidential first main ingredient included in a request from the product manufacturer to information regarding the second main ingredient stored in the database by selecting a second main ingredient having a different pharmacological effect than the confidential first main ingredient by comparing properties of the confidential main ingredient information stored in the database with properties of a plurality of potential second main ingredients stored in the database;

composition ingredient determination means for selecting a composition ingredient based on one or more properties of the confidential first main ingredient or the selected second main ingredient; and

communication means for receiving information regarding the confidential first main ingredient from the product manufacturer and for transmitting information regarding the selected second main ingredient and the selected composition ingredient to the composition manufacturer system, wherein

the medicine prototype support system does not reveal the identity of the confidential first main ingredient to the composition manufacturer system.